

HINTS

ON

STABLE MANAGEMENT

BY

MAJOR-GEN. M. F. RIMINGTON, C.V.O., C.B.

Inspector General of Cavalry (India).

FOURTH EDITION.

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HINTS
ON
STABLE MANAGEMENT.

A FEW OF THE NUMEROUS PRESS OPINIONS.

"ARMY AND NAVY GAZETTE."

"Hints on Stable Management" is another capital little book by Brig.-Gen. M. F. Rimington. The author has had long experience of horses and of the difficulties besetting the carrying out of the golden rule, "Fit, not fat." The utmost care, he rightly says, is requisite to keep horses in good condition and capable of standing hard work. The hints are pre-eminently practical.

"THE BROAD ARROW."

"Hints on Stable Management," by Brig.-Gen. M. F. Rimington, is a thoroughly useful little guide which should prove useful alike to military and civilian horsekeepers. The "Hints" are dealt with in seven sections under the following heads:—"Forage," "Conditioning," "Grooming," "Shoeing and the Feet," "Care of Horses in the Stable," "Bitting and Leaving the Ranks," "On the March and in Camp." The book of "Hints" is a veritable *multum in parvo*.

"THE ALDERSHOT NEWS."

Under the title "Hints on Stable Management," Gale and Polden, Ltd., have just published a book of instructions, by Brig.-Gen. M. F. Rimington, for the care of horses in the stable and in the field. These instructions, which are written in the clearest possible language, should prove of great value to young officers and sergeants in keeping the horses under their charge fit and healthy. The good condition of animals depends very largely, as everyone knows, on the care and system which are employed by those who are responsible for their management, and these hints, in the preparation of which veterinary authorities have added their assistance to Brig.-Gen. Rimington's experience, show just what is required to be done at all seasons and under all circumstances. The book is divided into chapters on "Forage," "Conditioning Horses," "Grooming," "Shoeing and the Feet," "Care of Horses in the Stable," "Bitting and Leaving the Ranks," and "On the March and in Camp."



DIVISIONS OF THE HORSE'S BODY.

THE HEAD.

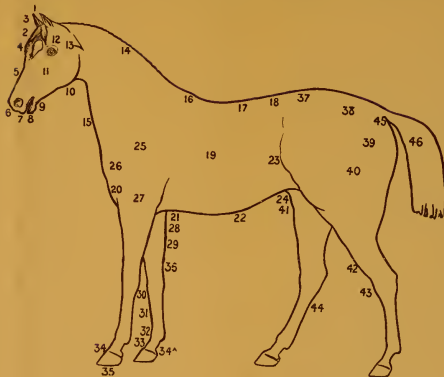
1. Nape of Neck or Poll.
2. Forelock.
3. Ears
4. Forehead.
5. Face.
6. Nostrils.
7. Upper Lip.
8. Under Lip.
9. Place for the Curb-chain.
10. Lower Jaw.
11. Zygomatic Ridge.
12. Hollow above the eye.
13. Maxillary Joint.

THE NECK.

14. Mane or Crest.
15. Lower part of neck or throat.

THE TRUNK.

16. Withers.
17. Back.
18. Loins.
19. Side of Chest.
20. Breast.
21. Floor of Chest.



22. Abdomen.
23. Flanks.
24. Sheath or prepuce.

THE FORE LIMBS.

25. Shoulder.
26. Point of Shoulder

27. Arm.
28. Elbow.
29. Fore-arm.
30. Knee.
31. Shank or Canon-bone.
32. Fetlock-joint.
33. Pastern
34. Coronet.
- 34a. Heels.
35. Hoof.
36. Chestnut.

THE CROUP and HIND LIMBS.

37. Haunch.
38. Croup.
39. Hip-joint.
40. Upper Thigh.
41. Stifle.
42. Lower Thigh.
43. Hock.
44. Chestnut.

The descriptions from the Hock downwards are the same as in the Fore limbs.

THE TAIL.

45. The Root of the Tail or Dock.
46. The Hair of Tail.

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INTRODUCTION.

One day at stables, I requested one of the sergeants in charge of a troop to prepare a list for me of all the various points I had, from time to time, insisted on in the interest of the horses under his charge. The following day I was presented with a document, from which it appeared that over a hundred points required more or less constant attention.

This led me to the conclusion that it might be well to write out, in as simple terms as possible, short instructions for the care of horses in the stable and in the field. For several years I had the opportunity of observing the troubles and mishaps which occur amongst horses picketed in the open, and of dealing with the evils resulting from exposure to wet, from overwork, and from short rations. Latterly, I have had some experience of home service, where rough and ready methods are no longer admissible.

Constant observation of horses living under varied conditions, and made use of for many different purposes, has impressed on me that, whether at home or abroad, the utmost care and system are required to keep them in good condition, and capable of standing hard work.

In preparing these notes, I have kept in view the difficulties to be contended with in carrying out the golden rule that horses must be "fit, not fat." To attain this, the greatest vigilance is required even in little matters, and more especially in regard to rations.

If these hints, which are of the most elementary kind, and are expressed in the simplest terms at my command, in any way assist young officers and sergeants in maintaining the horses under their charge in a healthy and fit condition, ready for work when the pinch comes, I shall feel amply rewarded for the time spent in their preparation.

Since writing the above, the pinch *has* come. We have seen the officers and men who were ignorant of Horsemastership, absolutely useless and worse than useless in war. From General Officers to privates, those who in war ignored the necessity for the greatest care and trouble in these matters, as a rule, failed signally. The former's command dwindled from thousands to hundreds in a few weeks, the latter's mounts "gave in" in a few days.

Only a few degrees less hopeless were those who had been consistent "horsecoddlers," advocates of the fat and pursesey horse standing in straw up to his hocks with a Newmarket lick on his quarters: the horse who must not work lest he lose his condition.

There are few desirable accomplishments which are not the outcome of labour of brain or body, and expense in health or pocket. The art of good

Horsemastership in war is one of these accomplishments, and it is one for which it is worth our while to sacrifice a good deal in peace, if we honestly desire to possess it.

In war, one of the greatest crimes which a man can commit, is to neglect his horse, and, it is one for which he must receive the most exemplary punishment. A man who gives a horse a sore back from want of care must be invariably "crimed." An officer whose troop or squadron show an undue proportion of poor, sick, and lame horses, always having regard to the work done, had much better be sent to some branch of the service, where neglect of horses will not matter

The first thought, consideration, and anxiety of an officer commanding mounted men, must be for his horses. As Von Hoenig says:—Generals are too apt to forget that in tactics and strategy as far as mounted troops go, they must *reckon with the horses*, their stamina, food supply, and riding.

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HINTS

ON

STABLE MANAGEMENT.



CHAPTER I.

FORAGE.

SQUADRON HORSES' RATIONS :

A squadron horse's ration consists of 12lbs. of hay, 10lbs. of oats (weight not under 38lbs. per bushel), and 8lbs. of straw daily, but this admits of considerable variation, for, by arrangement with the contractor, linseed, bran, beans, peas, carrots, barley, wheat, etc., can be substituted for some of the oats, hay and straw provided by the regulations. A certain amount of hay is always necessary, but when a horse is doing fast, hard work the

grain ration should be increased at the expense of the hay. The grain is more sustaining and more muscle-forming than the hay, which, on the other hand, is useful in keeping up the condition. The relative value of hay and oats is well understood; for example, in certain well-managed stables, during the hunting season, horses doing fast work are only allowed 7lbs. of hay, but they get a liberal amount of grain.

RELATIVE VALUE OF GRAIN AND HAY:

In the same way, trainers, while giving as much hard food (oats, peas and beans) as their horses can comfortably consume, only give a small amount of hay, and are careful to prevent gross feeders from eating the straw used for bedding.

On the other hand, horse dealers, who are mainly concerned in keeping their stock in big condition, give an almost unlimited amount of hay.

In the case of squadron horses, circumstances must determine, to a considerable extent, the nature of the rations. In a thin hide-bound horse, which has never, as the

saying is, "put his food into a good skin," a change of diet (more especially a change from the ordinary rations to one consisting partly of boiled food) often works wonders. A horse which has always been an eyesore may, with a change of diet, rapidly get into condition, and ere long become so fit, that he not only looks quite a different animal, but is equal to a fair amount of hard work. In all cases, the *cause* of their want of condition should, if possible, be discovered, and thereafter suitable food provided, the object being always first to improve the general condition, and then gradually to restore the tone of the muscles, until any given horse can comfortably do a reasonable amount of work.

Compared with sheep and oxen, the horse has a small stomach, which requires to be frequently replenished. There is an old saying that "children and chickens should always be picking," which applies equally to horses, for they thrive best if, instead of hurried feeds and long fasts, they have the opportunity of feeding leisurely at comparatively short intervals.

A squadron officer should read the forage contracts carefully, and always bear in mind

that Government contracts are so drawn up, that he has full power to cast anything that falls below the contract standard. He should inspect the forage regularly, and take care that bad stuff is not supplied.

It is to the interest of the contractor to supply the cheapest stuff in the market, and he will use any means he thinks right to do so. It is your interest to get the best you can, and you will find that you are duly protected by the contract.

Having assured oneself that the forage is up to the contract standard, one should next see that one gets full weight. Occasionally weigh the whole of the forage drawn, and compare the result with the amount shown as drawn in the squadron quartermaster-sergeant's book.

OATS.

TESTING, CHOOSING AND WEIGHING OATS:

The oats from first to last require very careful supervision. It is necessary to prevent unsuitable oats being delivered, and still more to prevent their being surreptitiously

made away with after delivery ; for there are always people in need of oats who care little how they come by them.

It will be found advantageous to divide, as far as possible, the responsibility for the condition of the horses. For example, the senior non-commissioned officer in charge of each troop might be made responsible for the right weight of oats being supplied.

When the oats are submitted for inspection you should select one of the sacks yourself from the wagon and first note if they are clean, i.e., free from lumps of dirt, small stones and sand, thistle heads, mustard and other small seeds, and from other kinds of grain, such as barley. It is not necessary to reject oats which contain clippings from the oats themselves ; this is not dirt, and is readily got rid of by sifting—a corn sieve is a necessity in every stable. Next ascertain if they are in good condition, crush a few between the teeth by way of testing whether they are sweet or sour. New oats are soft and easy to bite ; horses deteriorate in condition when fed on them. Oats should not be taken if they contain a large number of immature grains. They should smell sweet.

If clean and otherwise satisfactory, you should next see that they are up to the standard weight. First adjust the scale, and then weigh the measure accurately, and keep in mind that it is necessary occasionally to test the weights in use. If satisfied with the scale and weights, have the oats poured *quickly* into the measure from a height not higher than the knee, then strike at once, and weigh. Make sure the adjusting screw of the weighing machine is not tampered with after the measure has been weighed.

HAY.

SELECTION OF HAY:

To be in a position to test the hay, it is advisable to learn from farmers and others the different kinds of hay grown in the district, and the respective prices they fetch at market. Make it your business to learn how to recognise the grasses and weeds peculiar to good and bad hay. This may be done partly by consulting experts, and partly by referring to Sir F. Fitzwygram's book,

“Horses and Stables,” and other standard works. In hay that has been well saved, the seeds are not readily shaken out. When there is an absence of flowering heads, the hay has most probably been made from a second cutting, and is less nutritious.

CANADIAN AND BALED HAY :

The best Canadian hay containing Timothy grass is most excellent, but as nearly all Canadian hay is charged with dust, it requires to be shaken until the dry grit is got rid of ; the musty odour common to baled hay often disappears after exposure to the air. The hay should then be sprinkled with water, or, still better, with brine ; otherwise it is apt to irritate the throat, and it is further difficult to swallow.

MUSTY AND MOW-BURNT :

Under no circumstances should hay be accepted that is mouldy, or has a musty or foul smell, or is much mow-burnt ; as a rule, meadow hay any darker than a walnut shell is the mow-burnt, but this does not apply to clover.

NEW HAY:

It is necessary to exercise great precaution to prevent new hay being passed into barracks before the date fixed by contract.

A close inspection of the hay will usually reveal the tell-tale flower of its natural colour or a plaintain leaf (rib grass), which is not crisp and brittle as in old hay, but soft and pliable, whilst the sap will remain in the knots of the grass.

The hand plunged deep into new hay will, as a rule, experience a warm, damp feeling.

STRAW.

SELECTION OF STRAW:

Make sure you get the full proportion (two-thirds in most contracts) of wheat straw contracted for, and see that the straw is well-grown, tough in the fibre, and not easily broken into short lengths. See that you do not get a greater proportion of oat straw or of baled straw than is laid down in the contract. One should open a truss or two to see

that the centre is not stuffed with weeds and inferior straw.

ECONOMY OF STRAW :

Economy in straw is most necessary. Squadron horses, as a rule, eat a large amount of straw, even when it is considerably soiled. An eminent army veterinary surgeon has estimated that each horse eats, on an average, 5lbs. of straw per diem. To prevent this, as far as possible, the clean straw, which the horses eat most readily, should be put well back from their heads, as far out of reach as possible.

Constant supervision is necessary to prevent the men from removing clean straw in the barrows. It will be often found expedient to mix the clean straw with the old, somewhat damp, bedding. By doing this, the air more readily penetrates the bedding when out in windrows.

Economy in the management of the bedding will sometimes, especially in the summer, enable you to leave in, say, 1lb. of straw per horse, in lieu of which you will be able to draw corn, etc.

SUBSTITUTES FOR STRAW.

MOSS LITTER :

In many cases moss litter is an excellent substitute for straw, in some circumstances, for instance, on rough cobbles, or where there is no drainage, it is preferable to straw. It may either be used by itself, or, better still, under a thin layer of straw. By absorbing moisture and acting as a disinfectant, it keeps the stable sweet and free from smells, and at the same time forms a clean and comfortable bed. It is better to use a thin layer and remove daily all the wet patches. With a thin layer of straw over the moss a warm bed is formed even in winter. For horses inclined to thrush moss litter is often invaluable. It is also useful for restless horses which are in the habit of pawing away their bedding. Good moss litter is full of soft fibre and free from dust and hard lumps.

SAWDUST :

Sawdust possesses many of the advantages of moss litter, and in some cases is preferable, as it is cheap and not liable to be eaten. It has the advantage of keeping the horses clean

and preventing the bedding stains so common when damp straw is used. Only the wet portions need be removed. It is an excellent deodorizer.

CLEANLINESS :

The system advocated some years ago in the cavalry of placing clean straw over damp and soiled straw, layer upon layer, until a thick cake is formed, should never be adopted. Under this system the horses' feet and constitutions suffer, saddlery, logs, etc., get lost, and the stable, which ought to be clean and sweet smelling, is converted into a series of dunghills.

CHAPTER II.

CONDITIONING HORSES.

CARROTS :

Carrots should always be given, when obtainable, during the winter, they may be taken in lieu of straw at their market value. The carrots should be sliced longitudinally, not transversely, otherwise they are apt to cause choking by getting fixed in the gullet. Two or three carrots (equal to about 3lbs.) per diem are ample. If dirty they should be washed.

LINSEED :

The seeds simply scalded are often good for horses, more especially after a hard day's work. When the coat is staring and the horse is in need of a laxative, good often results from a wine-glassful of linseed oil, if possible added to an equal quantity of lime water, being mixed daily with the food. Without being such a violent purgative as aloes, linseed oil serves as a laxative. Some-

times it may be found more convenient to use linseed cake. It should be pounded and given with the food. Castor or cod liver oil, given with the feeds in wine-glassful doses once a day, often has an excellent effect on horses. Linseed is apt to be very much mixed with injurious seeds and dirt. It should be large, plump, and free from impurities.

TREACLE:

Treacle is supposed by many to improve the coat in winter. It has the advantage of being cheap, and, as horses get extremely fond of it, may be useful in the case of bad feeders. Its tendency is to fatten, but some skilful feeders thoroughly believe in its power to improve and harden the condition of a horse. It should be given with a mash, or diluted with hot water and poured over chop or chaff.

SPICES AND CONDITION BALLS:

It would be invidious to recommend specially any one of the many excellent condition balls now in the market. But when there are a number of horses under one's care it will be, as a rule, most economical to obtain

a good recipe and have it made up by a wholesale druggist. In many cases the following will be found useful:—

Powdered Ginger 4oz. (Zingib. rad. pulv. oz. iv).

Powdered Aniseed 4oz. (Anisi. sem. pulv. oz. iv).

Powdered Carraway Seed 4oz. (Carui. sem. pulv. oz. iv).

Powdered Linseed 4oz. (Lini. sem. pulv. oz. iv).

Mix well and give a tablespoonful in each feed. If the horse is much exhausted and off his feed, add a tablespoonful to a pint-and-a-half of hot ale. This is generally most effective.

BREWER'S GRAINS:

When there is a brewery near at hand grains may sometimes be made use of with advantage if given in moderation, but they should not be kept long, and are harmful when they have fermented. They are improved and kept sweeter when a little salt is added. The grains are believed to assist in putting on flesh, they are certainly useful in

keeping horses, which are not doing fast work, in good condition during winter.

The malted grain is highly recommended in Yorkshire as a tonic for a horse off its feed, and it is immensely liked. For pulling round an exhausted horse, malted grain is almost as good as a quart of beer or porter, and it may make him feed when everything else fails.

BOLTING OATS, &c. :

Sometimes horses bolt their oats whole. When this is the case most of the grains escape in the droppings, without supplying any nourishment, or they may be retained and lead to colic. In such cases the molar teeth are often so irregular and studded with sharp points that they are useless for grinding the corn. The lower molars get these sharp points on their inner edges, the upper molars on their outer edges. These jagged teeth generally lead to laceration of the tongue and the insides of the cheeks. When the teeth are in this condition they should be carefully filed; but, it may be added, filing horses' teeth is a tedious operation which farriers are not very fond of. It is well to have the teeth examined periodically, say every six months.

The small wolf's teeth, which lie near the molars, and often hurt the tongue, should be removed with the aid of forceps.

Sometimes horses bolt their oats, not because of bad teeth, but out of sheer greediness. To prevent this, give more chaff, or, as is recommended by many experienced stud grooms, add a handful of dry bran to the oats. These greedy horses should not be fed from nose-bags or from small deep troughs, but on the floor or from large troughs, so that they cannot swallow their grain too quickly.

Many horses, when feeding, push a considerable amount of their food out of the manger on to the floor. This may be prevented by placing a couple of large rounded cobble stones, or still better, two large lumps of rock salt, in the manger for the horse to knock his nose against.

In young horses the mouth is often very tender during teething. Sometimes the irritation is greatly reduced, if not completely allayed, by the removal of the all but detached milk teeth.

LAMPAS :

Not infrequently, when a horse is out of condition, the bars of the mouth swell so as to project beyond the level of the teeth. This is known as lampas, and is an indication that the digestive apparatus is out of order. The barbarous plan of cutting or burning the bars of the mouth (still practised by some ignorant grooms and farriers) should never be resorted to. The best plan is to give soft food, such as grass, if available, carrots, bran mashes, and a liberal supply of salt.

CRUSHED OATS :

Many good stable managers are strongly in favour of bruising or crushing a horse's corn. Some people say that it makes a horse greedy, but at all events the digestive juices get to work at once on the flour, which is a good point.

In the case of young horses which are in process of losing their teeth or of horses with indifferent teeth, crushed oats, being more easily masticated and digested, are certainly an advantage.

COOKED FOODS :

Oats are sometimes cooked by being steamed in the same way as a bran mash, but it is very questionable if there is any advantage in thus treating them. Cooked barley, on the other hand (a portion of 3lbs. per diem being given to each horse) has a very excellent effect, and can be strongly recommended for thin horses, especially during winter. Barley is not wholesome *unless cooked*.

PEAS :

A handful of good white peas with each feed is useful for conditioning a horse and increasing his staying powers.

BEANS :

Beans have much the same effect, but are more heating. They are more adapted for feeding aged horses than young horses which are not doing hard work.

MAIZE :

For nearly nine years I saw horses regularly fed on maize or mealies, as it is called in

South Africa (up to 10 and 12lbs. per diem being given), and it certainly was most sustaining and put on excellent condition. It should be crushed or soaked, otherwise it is often too hard for a horse to masticate. It swells very much when damped, and if water is given immediately after a feed of maize it is extremely likely to cause colic or stoppage of the bowels.

ROCK SALT :

Horses often suffer from an insufficient supply of salt. Some people believe lumps of salt placed in the manger lead to windsucking, but the absence of salt is a more likely cause of this and other evils. As only a very small amount of salt is provided by regulation, an additional supply should be obtained in exchange for straw. The salt may either be given in the form of large lumps, placed where they can easily be reached, or as brine sprinkled over the hay—the hay is consumed all the more rapidly when thus salted. When in camp, table salt may be substituted for rock salt, being mixed with the food and given in the nose-bag.

CURE FOR WORMS :

Salt, among other things, tends to prevent indigestion, and it often assists in freeing a horse of worms. Worms are, however, best got rid of by giving a course of sulphate of iron, say from half-a-drachm to one drachm daily for a week or ten days, to be followed at the conclusion of that period by a pint of linseed oil, or, what is more efficacious, three to five drachms of aloes.

TURNIPS :

Turnips should only be used in limited quantities. Three large turnips a week are ample. As they are much used by horse dealers, they probably help a horse to put on flesh. On no account should turnips be placed in the manger with rock salt, as the salt makes them dark in colour and unpalatable.

POTATOES :

Potatoes are excellent for fattening purposes, and are invaluable for getting some horses into condition when other means fail. Ten to fifteen well-boiled potatoes may be given per diem. They should be thoroughly

strained, as the water in which they are boiled is irritating and diuretic in its effects.

GREEN FORAGE :

During the spring cut grass mixed with hay half and half is very good for horses, but you should be careful to avoid using that which is grown on a sewage farm, or which is saturated with moisture. If grass has been lying in a wet state for 24 hours or longer, fermentation may have set in, and it would be very bad, and might very likely produce colic. When feeding chiefly on grass, it will be found better to use beans or maize or a mixture of the two instead of oats ; beans and maize contain more muscle-forming ingredients, and their heating qualities are counteracted by the cooling properties of the grass. Having decided to take grass in exchange for hay or straw, care should be taken to obtain a fair equivalent, and especially to have due allowance made for any excess of moisture in the grass when weighed out.

BRAN :

Bran is useful for making mashes, but horses should not be fed on bran alone for

any length of time, as it leads to indigestion. In selecting bran, avoid the small ground dusty kinds, and choose that which is coarse—the coarser the better—and test it by both smelling and tasting. As bran soon becomes sour, be careful to have what is left about the corners of the manger carefully removed.

MASHES :

In making a bran mash, first put some bran and a quantity of *boiling water* into a pail or tub, then sprinkle dry bran on the top and leave standing for *a couple of hours* covered over with horse-rubbers or a rug. Before giving the mash, have it well stirred with a clean stick, *not with a man's hand*, for in this, as in everything about the stable, cleanliness is of the utmost importance. Salt or treacle may, with advantage, be added to the mash.

THIN HORSES :

When a horse which is living under apparently favourable conditions becomes emaciated — neither from overwork nor from extreme age—an effort should be made to discover the cause of the thinness. Begin by

sending for the person responsible for the condition of the horse and for the farrier, and with their assistance solve the following points:—1. Has the horse lampas? 2. Is the tongue sore? 3. Has he wolf's teeth? 4. Are the molars sharp and irregular? 5. Does he quid his food? 6. Are the teeth unsound or out of order, or (in the case of a young horse) are the milk teeth remaining in too long, and thereby interfering with the coming of the permanent teeth? 7. Does he bolt his oats? 8. Does the adjacent horse steal his oats or bully him? 9. Is he a "spare horse?" 10. Does he suffer from parasitic worms? 11. Is his urine normal? 12. Is his liver out of order (this is indicated by a yellow and bloodless appearance of the gums)? 13. Is he watered regularly? If it is still impossible to account for the horse being out of condition, you should next endeavour to find out if he really gets his oats or only a small proportion of them, in a word, if the oats are being systematically stolen. Assured that the corn is not tampered with, it becomes necessary to make further inquiries as to the habits of the horse, as to whether he is restless, or in the habit of fretting or over-

exciting himself either in the stable or when at work. In some cases it is impossible to discover the cause or causes at work. In obscure cases a complete change of diet, and, as far as possible, of the surroundings, often have a wonderful influence. For example, a couple of months' run at grass in the spring or summer is most beneficial to thin hide-bound horses. Failing this it will often be found useful to fill the manger at each stable hour with chaff; this will give the horse something to pick at, and keep him from fretting. Some men get horses into condition more easily than others, and it will often be found that a thin horse put into good hands will rapidly improve.

THE DUNG :

Under the ordinary corn and hay diet the dung should be of a light brown colour. If dark in colour or foul smelling the want of a change in diet or a laxative is indicated. The droppings should be removed at once by the stable guard, and they should be periodically examined for passed oats and for worms. Some horses, more especially geldings, acquire the habit of eating their droppings. This is

another reason why they should be removed without delay. As the habit of picking up droppings is in some cases due to acidity of the stomach, and as it is a fruitful source of indigestion, etc., some treatment should be adopted. A small daily dose of bicarbonate of soda, by correcting the acidity, may put an end to the objectionable habit.

WATERING.

WATERING :

A horse should never be hurried when quenching his thirst. Sometimes a soldier owing either to ignorance, carelessness, or impatience, may be seen dragging a horse away from the watering trough when only half satisfied ; when he pauses, it may be to breathe before taking a second draught or because the water is cold. Officers and non-commissioned officers should be on the watch, and as far as possible prevent undue hurry.

During cold weather the chill should, when possible, be taken off the drinking water. This is specially desirable in the case of young horses, as very cold water fresh from the tap, by rapidly lowering the temperature, reduces

their vitality, and consequently their power of resisting disease.

The temperature of the drinking water may be sufficiently raised (1) by simply keeping it for a time in a barrel or in buckets in the stable; (2) by adding a little hot water to each bucket before offering it to the horse; or (3) by placing the water in the feeding trough of the spare stall usually available in remount stables. This latter alternative has this advantage: that it diminishes the chances of young horses being infected with various diseases, which are not uncommon when they are all watered at the same trough, and further it gives each horse the opportunity of drinking when thirsty. It is needless to add that the trough should be emptied and cleaned out once a day.

Water given on the line of march or during manœuvres in warm weather is quickly absorbed into the system; hence within half-an-hour of drinking, severe exercise may be given without any ill-effects following. Half-a-bucket of water has about the same effect on a horse as half-a-pint of water on a man.

A horse should always be watered *before* being fed. This is the general practice in the

army, but the importance of giving water *before* feeding is not yet sufficiently recognised in private stables. *At least* an hour-and-a-half should elapse after a feed of grain before water is given. The reason for this is that otherwise the water is apt to wash the undigested grain out of the stomach into the intestines, where it swells and causes colic or stoppage.

A most necessary precaution when marching with troops is to carry nose-bags in a proportion of one to four horses for the special purpose of watering the horses at places where the water is hard for them to get. Horses accustomed to be watered at a trough or in a bucket drink slowly and painfully from a shallow stream, and must be given plenty of time.

Horses standing in the open do not require water early in the morning unless they have been out early and it is a warm morning; 9.30 a.m., or two hours after the sun is up, is quite soon enough for first watering.

CHAPTER III.

GROOMING.

INSTRUCTION OF RECRUITS:

A recruit on joining a squadron should endeavour to acquire a good style in grooming. He will be helped in this by watching an experienced groom at work, but the sergeant should carefully instruct him as to the following points:—

- i. The correct action for grooming the various parts of the horse.
- ii. The proper order in which to work.
- iii. How to stand well back from the horse, with his legs apart, so that he can put weight into his work without wobbling about.
- iv. The way to use the curry-comb, so as not to drop the scurf on the horse.
- v. How to work through the mane and forelock.
- vi. How to comb the tail from underneath, and not break the hairs by combing down the topside.

- vii. How to pick up the feet with safety, and wash them without wetting the heels or slopping water about the stall.
- viii. That under the mane and in the hollows must be kept as free from scurf and dirt as the more conspicuous parts.
- ix. How to wisp a horse.
- x. That he must not put the cleaning things and brick - dust on the manger, or blow out the curry-comb or knock it on the bail or stall post, but must tap it out on the floor, in a heap near the drain.

When mistakes are made he must be promptly checked, and the "reason why" shortly explained.

The orders for stable management in the King's Regulations must be thoroughly known and strictly adhered to.

METHOD OF REMOVING SCURF:

Scurf and greasiness can be removed from a horse's coat and a bright appearance given by rubbing damp sea sand into the hair, waiting till it is dry and then brushing it out. It

must not be imagined that this is recommended as a substitute for regular grooming: the latter has untold advantages. Wiping, for instance, helps to condition a horse.

A word of approval from an officer to a man who shows up a well-groomed horse goes a long way.

MANES AND TAILS.

MANES :

A good mane, lying on the near side and of the right length, is one of the signs of a well-groomed squadron horse. If the mane will not lie over on the proper side, it should be plaited and lead weights attached, or the patent indiarubber covered clip may be used and will quickly have the desired effect. Constant water brushing is most necessary and should be regularly done at every stable hour.

HORSES RUBBING MANES :

Some squadron horses, especially greedy ones, have a most disfiguring trick of completely rubbing away an inch or two of their mane against the iron manger fixings. They do this whilst attempting to pick up seeds, etc., under the next horse's manger.

Directly symptoms of this are noticed, a pole should be fitted, or a spare bail taken and fixed with wire horizontally about 18 inches below the manger, so that the horse cannot get his neck under and rub the mane.

It is sometimes advisable to wash the horses' manes and tails. A weak solution of Macdougall's Sheep Dip and hot water will reduce the possibility of parasites remaining on the horse and would appear to allay irritation. Slopping the water about the neck and quarters when doing this, causes colds and coughs, especially in cold weather. A sponge dipped in the mixture should be used at the roots of the mane; while the tail should be dipped in the bucket and carefully rung out.

SHORTENING MANES:

If a mane is very *thin* and of uneven lengths, scissors should be used by a skilled man to shorten it, as a barber uses them to cut hair; that is, slipping the mane through the fingers and cutting with a waving motion so that no lock of hair is cut the same length or square across.

Another method is to cut the hairs off against the sharp edge of a tenpenny nail, by

twisting a few at a time round it, and pulling sharply downwards.

CLIPPING :

The King's Regulations state that clipping must not be done so as to necessitate a rug. A good plan is to clip the belly and inside of the legs, and singe the remainder. At the junction of the singeing and clipping the long hair should be lightly clipped or further singed. When this method is adopted, even in an ordinary squadron stable, a rug can be dispensed with.

Clipping in the spring does little or no harm, and may be most useful in the case of horses with heavy coats. Late foals and horses with defective vision* are said by some to carry heavy coats, which are not easily got rid of, and in such cases clipping in the spring may be especially useful.

SINGEING :

Clipping is generally followed by singeing, and it is believed to prevent horses from

* Cf. Major Fisher. "Through Stable and Saddle Room," page 210.

readily catching cold. In singeing a very long-coated horse, great care must be exercised to prevent the skin being injured. The operation should be performed gradually, the hair being rubbed up with an old brush before the lamp is drawn down. If the hair is rubbed up each time, before the lamp is applied, the longest hairs will be burnt first, and eventually the coat will be greatly reduced without the skin in any way suffering.

ADVANTAGES OF SINGEING :

It is a matter of common experience that horses which are clipped and singed and rugged up during the winter, not only improve in condition, but are capable of doing double the work possible with heavily coated horses, which, the moment they begin fast work, are all in a lather from profuse sweating. It may here be remarked that constant sweats will soon wear a horse to rags, whilst it seems to have little or no effect on a man, as, for example, a blacksmith. The sweat of a horse which is fit is quite clear like water, whilst that of an untrained horse is thick and greasy.

CHAPTER IV.

SHOEING AND THE FEET.

REMOVING :

Never let a horse go more than a month without being either shod or having the shoes removed. Many horses require their shoes removed about every three weeks, otherwise the hoof grows too long, and they are liable to trip or get corns from the shoe being drawn forward as the hoof lengthens, and the heels turn in.

LOST SHOES :

Replace a lost shoe as soon as possible ; never delay until you get home if it can be done in the field ; otherwise the foot may be injured and the horse lamed for months. As soon as you find you have lost a shoe, and the farrier is not handy, dismount, and with your hoof-pick and a stone either pull out or hammer down the clenches, so that they may not injure the opposite fetlock. In removing a shoe care should be taken that all the clenches are properly raised ; the nails can then be

easily drawn, one by one, without breaking away the wall.

RASPING :

Lower the foot with the rasp only, taking most away from the front, as this part of the hoof grows quickest. Be sure the two hoofs are rasped to the same size.

THE FROG :

Do not touch the frog unless to remove ragged edges, as it acts as a buffer and prevents concussion and slipping, therefore the bigger it is the better.

On no account cut the bars, or what ignorant farriers call "open the heels," as this removes the natural support and causes the foot to contract.

FIT OF SHOE :

The shoe should be made to fit the foot accurately, its outer surface being level with the wall of the hoof all round, except at the heels, where the shoe should overlap it slightly. If the shoe is too long it is liable to be trodden on and be torn off.

DUMPING :

The system of "dumping," that is, putting on a shoe too small, and afterwards cutting or rasping off the wall of the hoof at the toe to make it appear to fit, should be strictly prohibited ; it is only done by beginners or men who are too lazy to shorten the hoof by rasping the sole at the toe. Rasping the hoof in front soon ruins the shape and strength of the foot. Impress on the farriers the maxim :

The shoe to the foot, not the foot to the shoe.

BRANDING :

The outside of the crust or wall of the foot should never be cut or rasped, and the letters and figures branded upon it, in the case of a Government horse, should not be too deep. Branding should be done quickly and not renewed until the old marks are too low to be distinguished. This branding, especially if badly done, is a great source of weakness to the feet, but unfortunately no other satisfactory method has been found to replace it.

Shoes should be made flat to the foot, as the sole, as well as the wall, is intended to bear weight.

The average weight of each shoe is 16 ounces.

There are six nail holes, but only five nails are generally used, the inside heel nail being usually left out.

The nails should be brought out as level as possible, about one inch above the shoe.

CLENCHES :

The clenches should be carefully turned out and hammered down, but never rasped after hammering down, as rasping weakens their hold and accounts for many a lost shoe.

CONTRACTED HEELS :

Horses having contracted heels or thrush should be shod with tips ; this brings the frog on to the ground and causes it to grow big and healthy.

THIN SOLES :

Horses with thin soles, which are likely to become tender from their being much ridden on pebbly or gravelly roads, such as those near Aldershot, should be shod with broad webbed shoes, as these afford more protection to the sole.

OVER-REACH :

Over-reach is caused as follows : — The *inside* sharp edge of the toe of the hind shoe catches the heel of the forefoot and cuts it ; even the back sinew is occasionally seriously injured by being cut in this way. To prevent this, the sharp edge must be rounded off when the shoe is made ; if it becomes sharp from wear it must again be rounded off.

FORGEING :

Forgeing is that disagreeable hammering noise caused by the horse striking the toe of the fore shoe with the toe of the hind one whilst trotting. Horses that “ forge ” should be shod with the shoes well back and the toes rounded.

BRUSHING :

Brushing is usually a symptom of weakness or fatigue, and is especially noticeable on the march ; it may then be alleviated by using a Yorkshire boot, which can always be made in a few minutes by sewing a piece of tape on to a thick piece of rug. For brushing, a three-quarter or feather-edged shoe is often useful.

STUMBLING :

For stumbling use a shoe with the toe turned up.

CAPPED ELBOW :

A capped elbow is generally caused by the shoes being too long in the heels, and the horse, in lying down, bruising his elbow with the inside heel ; with a three-quarter shoe the elbow may recover, but in some cases a felt boot is the only effectual remedy.

CARE OF FEET :

A horse's feet should be washed as little as possible, as water rots them ; once a day is quite sufficient. All greasy dressings are unnecessary and should be strictly forbidden. Every man should watch his horse's feet just as carefully as he does its back, as they are the most important parts of the horse, and however perfect the rest of him may be, one bruised foot or loose shoe or bad thrush renders him useless ; therefore watch for clenches up, any smell about the frog, loose shoe, broken horn, shoes turning in at the

heels, ragged frog, etc., etc., and keep on reporting it until it is put right.

A shoeing list, showing when the horses are shod, or have their shoes removed, should be put up in the stable and checked daily.

PREPARATION FOR MARCHING :

Prior to making long marches on roads horses should be exercised on roads and not on grass or light sand, so that the feet gradually become accustomed to the concussion.

THRUSH :

When thrush appears keep all water from it. Get a handful of clean tow, and draw a little bunch of it backwards and forwards well up the cleft of the frog every stable hour ; and, when thoroughly clean, put in a little simple dressing, such as tar and alum, finely powdered sulphate of copper or calomel. The best dressing for weak, brittle, or shelly feet is hoplemuroma, a little of which should be well rubbed in quite up to the coronet every night and morning. This dressing is also excellent for cases of sanderack.

CHAPTER V.

CARE OF HORSES IN THE STABLE.**REMOUNTS :**

The chances of remounts being hung up in their collar chains, or getting their legs over the bails should be considered and guarded against, and the possible causes removed. Two logs should be put on their chains. It is a good plan, after winding a straw-plait round the stall posts and bails, to sew old sack'ing over it. When this is done the horses are less likely to pull it off, and it looks neater.

Sand, or a small amount of bedding, sprinkled on the floor, to prevent horses slipping up in the stall whilst being groomed or led out of the stable, is a most necessary precaution.

HORSES SLIPPING THEIR HEAD COLLARS :

Some horses become so expert at slipping their head collars that they constantly get loose, and the result is that they steal the other horses' food, and kick them and also

get kicked themselves. Slipping the throat lash out of the earloops, thus leaving it attached to the head collar by the crown piece only, will often prevent the collar being slipped; with this plan, however, the buckle sometimes causes injury to the near eye. The only certain way, in the case of old offenders, is to put a hobble on one foreleg and attach it to the upright of the manger with about four feet of rope. This does not prevent them from lying down.

KICKING HORSES:

In the case of a kicking horse, it is advisable to inquire as to possible disturbing causes, such as thrush in the hind feet, the presence of bots or worms, or his having a restless, troublesome neighbour. At the outset, it is advisable to place a kicking horse in a corner stall, having previously suspended a sack of straw in such a position that it will intercept the kicks. The horse should have plenty of hard work, and the effects of hobbling, or of removing the hind shoes, might be tried. When he hurts his feet each time he tries to kick and they get tender, he may

learn to restrain himself sufficiently to give up kicking. The restlessness which results in kicking can sometimes be cured by "gentling with a pole." This should be done in the school; while one man holds the horse, another should move a pole or lance shaft slowly over the quarters, hocks, etc. This should be continued, the pole being always returned to the same part, until the kicking ceases. It may be repeated daily, if necessary, for some time. Gentling with a pole over the hind quarters is a useful and safe preliminary to putting a horse in harness for the first time.

PUTTING ON A TWITCH:

The ordinary twitch on the nose or ears should never be used, as it hurts horses and makes them shy of having their heads and mouths handled. A much better plan is as follows:—Take a forage cord and tie the end (with any knot except a running or slip one) round the lower jaw, under the tongue, and tight enough to prevent the tongue getting under it; then carry the free end up over the neck and down through the loop. The horse's attention is distracted by his endeavours to

get his tongue under the loop, though the latter does not hurt him.

VENTILATION.

VENTILATION :

Very few grooms and coachmen have the slightest idea of the benefits of good ventilation. They like to cram straw into every crevice and opening by which foul air can get out and fresh air come in. When asked why they keep the stable so stuffy, they give as a reason that, if they did not keep the stable warm, the horses would "look starved in their coats" from the cold.

They confuse stuffiness with warmth, and they forget that the best way to keep a horse warm in winter is to clothe him well, give him plenty of bedding, and, if necessary, put bandages on him. It is ridiculous to keep a horse's coat shiny at the expense of his general health.

Whilst it is impossible to lay down any hard and fast rule for the ventilation of squadron stables, all concerned should bear in mind that it is nearly always practicable to have the windows and ventilators open on

the leeward side, and so have fresh air without exposing any horse to a through draught.

Horses and men do not catch cold whilst living in the open, but, after doing so, they nearly always get a cold on first being brought into a stuffy atmosphere of a stable or house.

One very clever trainer makes a rule that all the doors and windows shall be opened for half an hour before his horses go out to their work, so that the temperature of the stable may become equal to that of the open air. He says that this makes his horses less apt to cough at exercise. A common and frequently an effectual cure for a horse with a bad cold is to clothe him warmly and place him in a box with a southern aspect, and the top door left open.

CARE OF SADDLERY (From Regulations).

“ Once in six months saddlery and harness will be laid by in dubbing for two or three days.

“ Dubbing should be rubbed in lightly, *whilst the leather is still damp* from cleaning,

and when rubbed off again, and the leather polished with cloth or brush, there should be nothing left to soil the hand or glove.

“Carbine buckets, seats, and flaps of saddles being made of uncurried leather, and requiring to be kept stiff, should be only lightly dubbed annually.

“Soap should be used daily to produce mellowness rather than outward gloss.

“Leather must not be washed with soda nor soaked in water. Its vitality is quite destroyed by being soaked in hot water.

“Soap and lukewarm water, *without soaking*, is all right, but dubbing, oil, or good soap must be applied whilst still damp.

“Drying leather by the fire should be strictly forbidden.

“Leather articles exposed to the action of ammonia become weak and rotten sooner than those not so exposed; grease counteracts this.

“Soft soap contains an excess of alkali and should be sparingly used; if applied too freely it gives the leather a dark and sodden appearance.

“Beeswax and saddle soap are not objectionable, provided good yellow soap is used to the flesh (under) side to keep the leather mellow.”

CHAPTER VI.

BITTING AND LEAVING THE RANKS.

BITS :

There are several patterns of ports in the regulation bit. For pullers, the higher ports are generally most suitable. If one of your horses is in the habit of getting his tongue over the bit, make use of the Mohawk bit, i.e., a bit with an extra port fixed above the original one. The ends of the extra port are made to hook into the eyes of the ordinary bit, whilst the centre is fixed and kept in its place by an india-rubber ring. The additional port can easily be made by the farrier. Many horses, which are quite useless with an ordinary bit, come readily to hand when the Mohawk, which keeps the tongue in its proper place, is used. In dealing with a so-called "puller," it is always well to remember the truism, "that it requires two to pull." By simply slackening the reins, a give-and-take feeling often results, and the horse ceases pulling.

FITTING THE BIT :

The port of the bit should lie *on*, not *under*, the tongue, and be so adjusted that it rests two inches above the level of the nippers—incisor teeth—but never higher.

If the horse is pulling, as sometimes happens, owing to his mouth being dry, give him a handful of grass or wet the mouth.

PREVENTION OF KICKING :

Never allow a man to jerk his horse's mouth, except when he believes the horse is about to kick in the ranks. It should then be done sharply to be of any use in preventing kicking; but let it be remembered that a very violent jerk may easily break a horse's jaw.

Frequently examine the fittings of the horse's bits in the ranks, and especially look to the curb chains, which are apt to be put on too tightly.

CARRAGO NOSEBAND :

If a horse gets his jaw injured, or the sides of his mouth rubbed, or is, from any reason, unable to be ridden with a bit, any farrier

can easily make a "carrago noseband" for him; this is simply an iron noseband fitting to the nose, with rings at the sides for the reins, and a slit at each side for the head-piece. This, with a fixed martingale, will enable one to hold some horses, which are quite uncontrollable when their mouths are being hurt by a bit. The noseband is more comfortable and looks better, if a strip of leather is twisted round it.

AMERICAN BEARING REIN:

A horse which puts his head down into his chest and bores may often be broken of this habit by the use of the American trotter's bearing rein, which keeps his head up. It consists of a strap running from the saddle, through a ring at the ears and down the face, where it is fixed to the bit.

FIXED MARTINGALE:

If, on the other hand, a horse throws up his head and thus renders his rider scarcely able to control him, a fixed martingale should be placed on him, fitting so that he can just raise his head till the nose is parallel with the ground. The horse will

then throw his head up violently several times and hurt his nose against the nose-band; this will have a better effect on him, and will afford better opportunities to a good rider than the method of strapping the head down tightly in an unnatural position.

LEAVING THE RANKS.

LEAVING THE RANKS :

Every horse in a squadron must freely leave the ranks. This is an essential part of their training before they are dismissed the riding school; but often, after being some time with the squadron at drills, they develop a tendency to stick in the ranks; they are further spoilt by a shifty and indifferent rider. Such an one, taking his knees and legs away from the horse's sides, sticks his spurs in with an even, continuous pressure, and at the same time pushes his hand, grasping a slack rein, in the direction he wishes the horse to go. As this will never convey to the horse what is required of him, let the man be dismounted at once and a good horseman put up. Give the

horse a few minutes to forget the previous circumstances, and move the troop about.

Now let the horseman grip the sides of the horse and squeeze him up to his bit. Any assistance, such as a man to lead the horse out, should be forthcoming. The remainder of the troop may, if necessary, be dispersed. Directly the horse is away from the others, coax him with hand and voice, give him a handful of grass or oats, and ride him freely away from the troop. Let this be constantly repeated, and do not hurry the reformation. Constantly draw the horses out by number and give them plenty of detached practice.

In some cases of temper, severe measures may be necessary, but such should be carried out under the supervision of an officer. The method recommended in "Hayes' Illustrated Horse-breaking" for teaching a horse to lead is very useful for bad cases.

Above all, use common-sense and have patience with a horse of this sort.

CHAPTER VII.

ON THE MARCH AND IN CAMP.

SORE BACKS :

Owing to the extra weight carried, and the other unusual circumstances, such as irregular times of arrival, strange and often bad and dark stabling, which are incidental to most marches, the greatest care and precaution is necessary to prevent sore backs. In the first place it is absolutely necessary to get as much weight as possible off the horses' backs by the reduction of kit to the minimum.

Never allow anyone to induce you to believe that "it is only half a pound or a pound more, and will make no difference."

This is especially the case with weight carried on the front arch of the saddle, such as wallets, now, fortunately, as a result of the South African Campaign, done away with. The American General, Rosser, truly says that "Unsuitable saddles kill more horses in a campaign than bullets do."

Let each man clearly understand that he is responsible for his own horse's welfare, and that he must immediately report anything wrong with it, especially as to the feet and back; a slight swelling or heat lump on the back can usually be obviated by a different folding of the blanket, but the cause should be first sought, and, if possible, removed. Continued pressure on the swelling causes the skin to die, the flesh underneath it then festers, and a sore back results, which will take at least a month to heal. Ten minutes' care and a little common sense would have prevented this.

Bad riding, lolling about in the saddle, constant passing of pipes and lights backwards and forwards, and resting the hand on the butt of the carbine are frequent causes of sore backs, which proper supervision will check.

If an officer sees a man on the march resting himself sideways on the saddle or riding in a slovenly way he should at once cause him to dismount and walk.

Men, who are ordered to walk as a punishment or because their horses' backs are sore, should be placed under the charge of the

Assistant Provost Marshal, or the police; their horses should be led with the troop or squadron.

It may be regarded as an axiom that a horse which is ridden by a good and careful rider who picks his way, rides on the grass at the side of the road when possible, cares for his horse and keeps him well up to his bit when tired, can carry three stone more than one ridden by a mutton-fisted ignoramus.

The importance of strictly carrying out the order that saddles should not be removed immediately after a horse comes in from a long march will be better understood if the reason is explained. During the march the weight of the man and his equipment constricts the vessels of the skin (i.e., cause them to contract) under the saddle and keeps the blood out of them. This is especially the case at any place where undue pressure is caused by a badly fitting saddle. When this weight is removed, the vessels are suddenly filled again, and their walls cannot withstand the increased strain, so the fluid part of the blood escapes and causes a swelling. If, on the other hand, the saddles are left on for an hour or so on coming from the

march, there is a gradual restoration of the circulation.

It is of the utmost importance to remember that a wet blanket or numnah should never be placed next a horse's back, since this will cause sore back sooner than any other cause. After a bivouac in heavy rain, if possible, never saddle up till the surface which will be next the horse's back is dried. Let the men sleep on their numnahs and they will probably be kept dry.

CURE OF SORE BACKS :

The swelling or heat lump may be looked upon as a danger signal, neglect of which is followed by a sore back. And here let it be noted, that it takes at least 24 hours before matter forms under a gall, so if one finds matter when one's attention is first drawn to it, you may be sure that it was not reported when the danger signal first appeared. If matter has formed, it is best to poultice the place with linseed, bran or bread, or, failing this, to use hot water fomentations, then, when the sore is clean, apply a dry dressing of iodoform, simple starch and carbolic powder, or oxide of zinc powder. (Con-

tinued poulticing does more harm than good).

There is no more serious case of sore back than that which is caused by the gullet plate or back arch of the saddle pressing on the backbone. Injury done to the skin is bad enough, but when it is done to the backbone, which, it should be remembered, is just under the skin, it is ten times more serious.

When the horse is mounted, the saddle, from the gullet plate to the back arch inclusive, should be raised so as to admit the fingers between it and the backbone. With this exception, the saddle should fit close to the back, and should be placed so far back as not to interfere with or press upon the play of the shoulder blades. Having this in view, with some horses it is necessary to shorten the front of the sideboard. With others, it may be necessary to straighten out the points of the iron front arch and lower the sideboards; this is most often the case with narrow-withered horses.

If the horses have soft backs and there is little or no opportunity to fit the saddles prior to going on a long march, which may

very possibly happen on service, it is sometimes a good plan to put the blanket next the skin, instead of the numnah, as its surface is softer and less liable to cause galls.

Different systems are advocated for making long marches in a short time.

The Americans trot 12 minutes and then dismount and walk 12 minutes.

In a march where it is desirable to keep up 25 miles per diem for a week or ten days, the men should walk at least one quarter of the distance. This should include *all the downhill* portion of the journey. The men should walk as fast as they can leading their horses with bridoon reins over. Horses inclined to lag should be flicked up by the next man in rear.

Rifles, if carried, should be slung over the shoulder, and not left on the horses.

When horses are engaged in manœuvres or on service conditions, it is an axiom that no man should remain mounted when he is halted, unless there is a special and urgent reason for doing so.

Officers must insist on this on service, and must make the men cultivate the habit in peace.

SHORT STIRRUPS :

Nearly all soldiers ride with their stirrups too long, and the old saying should be borne in mind, "Every hole you take your stirrups up, after a long day's hunting, take six pounds off the horse's back." In marching order, with the heavy weight carried on the front of the saddle, this is still more important. It is a good plan to dismount going down hill as well as up hill; the former is, if anything, more important than the latter.

CLEANING SADDLES AND NUMNAHS :

After some short march, the opportunity should be taken to strip the saddles and examine the trees for loose rivets, etc. The leather should be soaped over and the numnahs sponged with a solution of Scrubbs' Cloudy Ammonia, in the proportion of one bottle to a bucket of hot water. This removes all caked sweat and hardness from them, and when dry they become as soft and smooth as when new.

GIRTHGALLS :

The best plan to prevent girthgalls is to let the men dismount early in the march, after

trotting up a slight rise, and tighten their girths, the saddles will then be well set back from the withers and elbows. Directly a girthgall is noticed, however slight it may appear, let the surcingle be taken off, put under the leathern seat across the sideboards as far back as possible, close to the back arch, and buckle tight. Then draw the girths, which should be loosely buckled, back to the surcingle by means of a short strap; when the girth is thus held well back it may be tightened.

If the surcingle is placed across the fantails, instead of as recommended above, it is apt to throw up the front of the saddle and make it go farther on to the shoulder.

COLIC :

Every person who is in charge of horses will probably have occasion, at some time or other, to treat a horse suffering from colic. The ordinary colic is easily recognised by the following symptoms:—The horse keeps looking round at his belly and kicking at it. He lies down and rises from time to time apparently free from pain. If professional advice is not available, as may frequently be the

case on the march, the simplest and best treatment is to administer a cold water enema. This can be done with a piece of ordinary india-rubber hose pipe attached to a tap. Two gallons may be allowed to pass up the fundament. No force should be used in inserting the pipe, the end of which should be greased. The tap should not be turned on strongly.

After giving the enema keep the horse walking about with warm but not too heavy clothing on him. If relief does not follow no harm can possibly be done by giving as a drench from a pint to a quart of linseed oil, to which has been added half to a whole tablespoonful of turpentine.

THE TIRED HORSE:

Tired horses on coming into the stable or bivouac should first be fed with some hay, for, say half-an-hour or more, then watered and fed with grain, or with a mash if obtainable.

Avoid giving a large feed of grain to a hungry or exhausted horse on the line of march; let him have some grass by the road-

side first, or some hay, then give a small feed of grain or better compressed forage.

INFLAMMATION OF THE BOWELS :

Continuous pain is an indication of inflammation of the bowels, a more serious disease, which hot fomentations may allay. Apply these as follows:—Let two men take the ends of a blanket, and after dipping it in a tub of hot water wring it out, and apply it to the horse's belly, where it is kept in position by another warm cloth.

It should here be mentioned that colic and inflammation of the bowels is almost invariably due to bad food, careless feeding, or sudden change of diet. I remember one horse which invariably got colic on a Monday morning. This was clearly traced to the fact that he greedily ate the straw, with which he was bedded down, on Sunday morning. The colic never returned after steps were taken to prevent his eating the straw. Always seek the cause of any illness of this kind. Nine times out of ten it is due to carelessness or disobedience of orders on the part of the groom.

RETENTION OF URINE :

Horses which have been ridden hard, especially hunters coming from a long day's work, should be encouraged to stale as soon as they come in by having straw shaken under them, and it is advisable to withhold their gruel and wisp of hay till they have staled.

In cases where a horse is evidently suffering from long continued retention of urine, due, very likely, to over-riding, the cold water enema applied as described for cases of colic will be found most beneficial.

SCOURING OR DIARRHŒA :

If symptoms of diarrhœa (violent purging of liquid dung) are noticed on the march, a simple and easily obtainable remedy is a dessert-spoonful of chlorodyne given in a quart of beer or stout.

IN CAMP :

It is usually when horses are first picketed on lines that accidents occur, and they generally arise from the horses being unaccustomed to the shackles, or getting their legs over the rope, or kicking each other.

PREVENTION OF ACCIDENTS :

To prevent these accidents, horses should, at any rate, at first be picketed as far apart as possible, and with the head and heel ropes rather short; they then, finding they cannot move about much, soon get used to standing quietly. These precautions are especially necessary in the case of kickers.

HEAD AND HEEL ROPES :

During nine years' service in South Africa we never used heel ropes, as our horses, with a few exceptions, were never shod on the hind feet; an enormous amount of transport was thus saved, and cases of injury from kicks were almost unknown. When it is necessary to shorten the head rope, it should be plaited. A clove hitch should be invariably used to knot it to the built-up rope.

The best way to fasten the ring end of the head collar is as follows:—Put a loop of the head rope through the ring of the backstraps, then put the ring of the head rope through the rope loop and pull the rope taut. This fastening never slips, and can be undone in a moment if the alarm sounds.

When taking a horse off the lines, unloose the heel ropes first; when fastening him up, fasten the heel ropes first.

RUGS:

In wet weather, as long as it rains, if possible, do not take the rugs off the horses, even keeping them on at exercise; 48 hours fairly heavy rain will not soak right through them, and the horses' coats will be warm and dry underneath. Stable guards must loosen the rollers when they become taut from getting wet.

WET WEATHER:

When it rains and the mud is deep in the lines, feed in the nose-bags with oats and chaff, or compressed forage, if obtainable. Draw oats in lieu of hay, or keep the latter till the lines are dry, otherwise more than half of it will be wasted. If hay must be used, feed frequently with small quantities.

In a wind hay-nets effect a great saving of hay; horses with a little practice will pull every bit of it out.

SALT :

Rock salt should be placed in large lumps in the lines for the horses to lick. When the lumps begin to get small they can be used to make brine, which should be sprinkled over the hay. A liberal supply of salt may be regarded as a preventive of sand colic, which is generally attributed to the horses licking up the sand for the sake of the salt in it.

STABLE SENTRIES :

Stable sentries require very strict supervision in camp, where their duties are often very trying, as they are responsible for seeing:—

1. That every horse is properly fastened up.
2. That nothing is removed from the lines.
3. That the lines are kept clean.
4. That any casualty among the horses is immediately reported.

If necessary, a non-commissioned officer should be placed in charge of them.

SEVERE WEATHER :

When horses are likely to be exposed to severe weather, as on service, there is no doubt that the less they are groomed with a brush the better, for, as Fleming remarks in the *Practical Horse Keeper*, "the grease and dandriff which accumulate in the long hair afford a natural protective covering."

A writer in the "*American Cavalry Magazine*" was the first to point out that in very cold winter weather in camp it was the greatest mistake to remove the scurf or dandriff with a brush, and that horses so treated deteriorated greatly, whilst those not brushed maintained their condition. It has recently been shown by physiologists that dandriff contains a considerable amount of oily matter which is of the utmost importance when horses are kept in the open. Wisping should be resorted to, and the brush used only to take off the rough mud stains, and for the mane.

CONCLUSION.

That the foregoing notes are by no means "a complete guide" I am well aware. Recourse must be had by those who wish to be really well up in the subject to works such as those of Sir F. Fitzwygram and Mayhew; whilst "Von Schmidt" will give them an idea of what can be done with horses which are fit, and will at the same time do much to create the interest and keenness as to horses which should characterise all cavalry soldiers. The example afforded to those under one by one's taking a keen interest in the horses will alone carry one a long way. Bear in mind that though the cavalry soldier is often heard to grumble about the trouble "the long-faced one" gives him, he really all the time loves his horse, and enters most thoroughly into any scheme or proposal for improving his condition and appearance. Constant supervision and visits at unexpected hours at stables will check irregularities and carelessness amongst stable guards.

Much can be noticed amongst horses when they are standing still in the stable without the bustle of stable duties going on around them, which will lead one to a closer understanding of their peculiarities, and to the successful treatment of any ailments they may suffer from.

Remember that "what is not inspected is neglected," and if you neglect your horses, and do not keep those in charge of them up to their duties, no credit for their good appearance and fitness will ever accrue to you.

Endeavour to make every man under you feel an ownership in the horse assigned to him and hold him responsible for its good training and condition.

On service, where a man by a little extra care and trouble can often obtain a little more forage or some titbit for his horse, this is especially needful.

With cavalry, who frequently must detach small parties, this is ten times more necessary than with artillery; the latter are always under the eye of an officer.

It should be impressed on all soldiers, especially on young ones, that every bump or

lump the horses get in stables, or slight strain which may follow on their getting loose in the barrack yard may, indeed, very often do, tell against the horse later on, when the rider's life or liberty depends on the soundness of his mount.

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